

CLAIM AMENDMENTS

1. (Currently Amended) A method for manufacturing a buried wiring structure comprising ~~the steps of:~~

forming a first depressed portion ~~on~~ in an insulating film;

applying a burying material ~~on said~~ to the first depressed portion and ~~on~~ said insulating film ~~to bury said~~, filling the first depressed portion;

~~performing~~ chemical mechanical polishing ~~of said~~ the burying material until the insulating film is exposed, ~~thereby~~ leaving the burying material in ~~said~~ the first depressed portion;

forming a resist having a pattern of a second depressed portion that overlaps ~~said~~ the first depressed portion on ~~said~~ the insulating film ~~wherein said~~ where the burying material ~~has been buried~~ is present;

etching ~~said~~ the burying material and ~~said~~ the insulating film ~~to a predetermined depth~~, using the resist as a mask, to form the second depressed portion;

removing ~~said~~ the resist and ~~said~~ the burying material left after the ~~step of~~ etching;
and

depositing ~~a~~ an electrically conductive material in ~~said~~ the first depressed portion and ~~said~~ the second depressed portion.

2. (Currently Amended) A method for manufacturing a buried wiring structure comprising ~~the steps of:~~

depositing an insulating film on under-layer wiring;

forming a contact hole in ~~said~~ the insulating film;

applying a burying material ~~on said~~ to the contact hole and ~~said~~ the insulating film ~~to bury said~~, filling the contact hole;

~~performing~~ chemical mechanical polishing ~~of said~~ the burying material until the insulating film is exposed, ~~thereby~~ leaving the burying material in ~~said~~ the contact hole;

forming a resist having a pattern of a wiring channel that overlaps ~~said~~ the contact hole on ~~said~~ the insulating film ~~wherein said~~ where the burying material ~~has been buried~~ is present;

etching ~~said~~ the burying material and ~~said~~ the insulating film ~~to a predetermined depth~~, using the resist as a mask, to form the wiring channel;

removing ~~said~~ the resist and ~~said~~ the burying material left after the ~~step of~~ etching;
and

depositing ~~a~~ an electrically conductive material in ~~said~~ the contact hole and ~~said~~ the wiring channel.

3. (Currently Amended) A method for manufacturing a buried wiring structure comprising ~~the steps of~~
depositing an insulating film on under-layer wiring;
forming a wiring channel in ~~said the~~ insulating film;
applying a burying material ~~on said to the~~ wiring channel and ~~said the~~ insulating film ~~to bury said, filling the~~ wiring channel;
~~performing~~ chemical mechanical polishing ~~of said the~~ burying material until the insulating film is exposed, ~~thereby~~ leaving the burying material in ~~said the~~ wiring channel;
forming a resist having a pattern of a contact hole that overlaps ~~said the~~ wiring channel on ~~said the~~ insulating film ~~wherein said where the~~ burying material ~~has been buried is present~~;
etching ~~said the~~ burying material and ~~said the~~ insulating film, using the resist as a mask, to form the contact hole;
removing ~~said the~~ resist and ~~said the~~ burying material left after the ~~step of~~ etching;
and
depositing ~~a~~ an electrically conductive material in ~~said the~~ contact hole and ~~said the~~ wiring channel.

4. (Currently Amended) The method for manufacturing a buried wiring structure according to claim 2, ~~wherein including applying as the burying material~~ an organic polymeric material having substantially the same etching rate as the ~~etching rate of said~~ insulating film ~~is used as said burying material~~.

5. (Currently Amended) The method for manufacturing buried wiring structure according to claim 1, ~~wherein including applying as the burying material~~ an organic polymeric material containing no aromatic compounds ~~is used as said burying material~~.

6. (Currently Amended) The method for manufacturing a buried wiring structure according to claim 5, further comprising ~~a step for~~ forming an antireflective film on ~~said the~~ insulating film ~~prior to the step of~~ before forming ~~said the~~ resist.

7. (Currently Amended) The method for manufacturing a buried wiring structure according to claim 6, wherein ~~said the~~ burying material and ~~said the~~ antireflective film are not soluble ~~to in~~ each other.